

Ligation

Materials and Equipment

- Microtube Rack
- Micropipette
- Micropipette tips
- Microtubes (0.6 ml)
- Thermocycler

Reagents

- Nuclease-free water
- DNA
- 10X T4 DNA Ligase Buffer
- T4 DNA Ligase

Methodology

1. For a 20 μ L reaction. Add in the following order:
2. 11 μ L nuclease-free water
3. 4 μ L Insert
4. 2 μ L Receiving plasmid
5. 2 μ L 10X T4 DNA Ligase Buffer
6. 1 μ L T4 DNA Ligase
7. Incubate at room temperature (20°C- 25°C) for 2 hours
8. Heat inactivate at 80°C for 20 minutes
9. Transform 10 μ L ligation into 50 μ L of competent cells
10. Store the rest at -20°C